



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/492,382

01/27/2000

Tetsuro Ashida

0879-0249P

9804

2292

7590

01/11/2006

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER

VILLECCO, JOHN M

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/492,382	<b>Applicant(s)</b> ASHIDA, TETSURO	
	<b>Examiner</b> John M. Villecco	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 6-9 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

ay

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see pages 8 and 9 of the amendment, filed October 14, 2005, with respect to claims 3-5 have been fully considered and are persuasive. The rejections of claims 3 and 4 have been withdrawn. Regarding claims 3-5, the examiner agrees that the combination of Moorman, Ueno, and Takanashi fails to properly disclose the applicant's invention.
2. Applicant's arguments filed October 14, 2005 with respect to claims 1, 6, and 7 have been fully considered but they are not persuasive. More specifically, applicant maintains that the combination of Moorman and Ueno is not proper because "Ueno clearly teaches that additional processing must take place with the information included in the area indication 700". However, the examiner continues to believe that the combination of Moorman and Ueno is appropriate. Moorman teaches the ability of the camera to highlight areas that are overexposed or underexposed. This is done so as to show the user what areas are not properly exposed so that the user can capture a better quality image. Ueno teaches the ability to select a specific area within an already captured image in which to perform autoexposure. Clearly, if a user is presented with information that a subject of an already captured image is not properly exposed, the user would take action to capture a higher quality image with a properly exposed subject. Therefore, when Moorman and Ueno are used in combination teach the ability to select an area to be used in performing autoexposure.
3. For the reason stated above the rejections of claims 1, 2, 6, and 7 from the previous office action will be maintained.

Art Unit: 2612

4. Additionally, applicant has added new claims 8-10. Please see the new grounds of rejection for these claims on the following pages.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 2, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moorman (U.S. Patent No. 5,041,911) in view of Ueno et al. (U.S. Patent No. 5,625,415).**

7. Regarding **claim 1**, Moorman discloses an exposure information feedback apparatus capable of informing the user of different levels of exposure within an image. More specifically, the apparatus is a camera (30) which includes a lens (31), an image sensor (12), and a display (46) for displaying the image captured by the image sensor (12). Before an imaging operation, the user selects or enters a plurality of range values to map to the image based on the pixel exposure value (interpreted to be the luminance). The digital signal processor (40) acts as both the gradation area dividing device and the color-coding device since the input digital code values (luminance values) are mapped into RGB output code values (col. 3, lines 60-68). Clearly the image is divided into areas of gradation coarser than gradations in the image capturing, since the gradation in the image-capturing are based on individual pixel signals. See column 4, lines 1-68. After dividing the image into the gradation levels the color-coded image is displayed on the

Art Unit: 2612

display device (46, col. 4, line 68). Furthermore, Moorman discloses that the image signals are stored in the recording device (42).

Moorman however fails to explicitly state that the system is able to select a gradation area and correct the image data or the exposure control based on the selected gradation area. Ueno, on the other hand, discloses the ability to select a portion of an image for which to base an exposure calculating operation on. Ueno teaches the ability to perform a pre-shooting operation to form a pre-shot image on the display. See Figures 7 and 8. The user then has the ability to select an area of the pre-shot image for which to base an exposure value on. The brightness of the area indication (700) is used to calculate a new stop value and shutter speed. By allowing the user to select an area of an image for which to base an exposure on, the system has the ability to form an image of a subject of the users liking using a proper exposure. See column 13, line 27 to column 14, line 48. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow a user of the camera of Moorman to select an area of the color-coded image for which to perform a proper exposure so that the user can compose an image with a proper exposure based upon the selected gradation level.

Additionally, neither Moorman nor Ueno specifically disclose a photometry device for determining the luminance of an image and performing auto exposure (AE) based on the luminance for the first exposure. While Ueno does disclose that a pre-shot (first exposure) is taken, he only discloses that the pre-shot is performed using initial data (col. 11, lines 33-34). He does not disclose how the pre-shot data is obtained. However, Official Notice is taken as to the fact that it is well known in the art to use a photometric device to perform AE based on a luminance of a subject when an image signal has not yet been taken. By using a photometric

Art Unit: 2612

device the system does not have to take an image of an object to determine an AE value.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a photometric device to determine a luminance for an initial image capture since an image has not yet been capture for which to calculate an exposure value.

8. As for *claim 2*, as shown in the two tables in column 4 of Moorman, the digital signal processor (40) gives different color values to the different gradation areas.

9. *Claim 6* is considered a method claim corresponding to claim 1. Please see the discussion of claim 1 on the preceding pages.

10. *Claim 7* is considered substantively equivalent to claim 1. Please see the discussion of claim 1 on the preceding pages.

11. Regarding *claim 8*, as mentioned above in the discussion of claim 7, Moorman and Ueno disclose all of the limitations of the parent claim. However, the aforementioned references fails to specifically disclose that the captured image and area divided image are optionally displayed on the display device. On the other hand, Official Notice is taken as to the fact that it is well known in the art to optionally display images on a display device. Numerous patents have been granted which include the feature of turning the display of a camera on or off. This is interpreted to be optionally displaying an image. This feature gives the user the opportunity to select whether or not to use the display. Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to optionally display the images on the camera of Ueno thereby giving the user numerous control options.

Art Unit: 2612

12. **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moorman (U.S. Patent No. 5,041,911) in view of Ueno et al. (U.S. Patent No. 5,625,415) and further in view of Jackson et al. (U.S. Patent No. 5,164,836).**

13. Regarding *claim 9*, as mentioned above in the discussion of claim 7, Moorman and Ueno disclose all of the limitations of the parent claim. However, the aforementioned references fail to specifically disclose that the captured image and the gradation area divided image are display simultaneously on the display device. Moorman is directed towards only displaying the gradation divided image and not the actual captured image. Jackson, on the other hand, discloses that it is well known in the art to display the captured image along with a representation of overexposed or underexposed areas. More specifically, Jackson discloses a storage unit (12) receiving an image from a camera (10). Using a comparator the storage unit (12) designates a pixel as properly exposed or not properly exposed. Based on this designation the pixel representation is visually indicated on the LCD monitor (13). By displaying the image and whether or not portions of the image are over or underexposed, the user can visually distinguish the portions of the image which are not properly exposed. Thus, the user can tell if the subject of the image is properly exposed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to display the gradation divided image and the captured image simultaneously on the display so that the user can tell if the subject of the image is properly exposed.

***Allowable Subject Matter***

14. Claims 3-5 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 3, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a contour sampling device that samples the contour of the subject from the image captured by the imaging device and wherein the image display unit displays the area of gradation color-coded by the color-coding device and the contour of the subject.

As for claims 4 and 5, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the luminance range designating device is constructed in such a manner as to select one color from color samples displayed on a screen of the image display unit.

With regard to claim 10, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the correcting device only corrects the image data of the area designated by the luminance range designating device.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



Art Unit: 2612

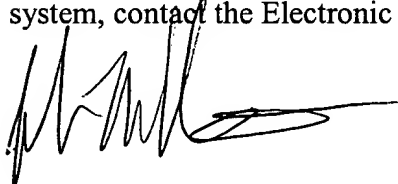
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John M. Villecco  
January 3, 2006



NGOC-YEN VU  
PRIMARY EXAMINER